

Abstract of the Disclosure

A ruled line extracting apparatus obtains circumscribed rectangles of pixel concatenation regions included in an input pattern, and calculates
5 the most frequent value of their heights. Additionally, the apparatus integrates segments by ignoring a wild card segment, and calculates the most frequent value of height/width of extracted straight
10 lines and segments structuring the straight line. Next, it performs a process for integrating/deleting straight lines using each threshold value based on the highest frequency value. Then, it checks/deletes a straight line according to a distribution of black
15 pixels around the straight line, and recognizes the remaining straight lines as ruled line candidates.